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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,236	06/27/2006	Giovanni Servadei	377/9-2140	2239

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EXAMINER	
GERRITY, STEPHEN FRANCIS	
ART UNIT	PAPER NUMBER
3721	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/550,236	SERVADEI ET AL.	
	Examiner	Art Unit	
	Stephen F. Gerrity	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-7 is/are rejected.

7)☒ Claim(s) 8 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 September 2005 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 9/23/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. § 119. The certified copy has been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

2. Receipt is acknowledged of an Information Disclosure Statement, filed 23 September 2005, which has been placed of record in the file. An initialed, signed and dated copy of the PTO-1449 form is attached to this Office action.

Specification

3. The abstract of the disclosure is objected to because of the use of legal phraseology (said). Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities:

- at page 4, lines 7 and 8, the reference to "claims" is improper; and
- at page 5, lines 12-19, the brief drawing description should be revised so that it is brief and generally directed to describing the figure.

Appropriate correction is required.

Claim Objections

5. Claim 8 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 8 has not been further treated on the merits.

6. Claim 7 is objected to because at line 2, "an" should be --a--, and the claim does not end with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 4/1, 4/2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Simon **(DE 19521924)**.

The Simon reference discloses in figure 11 a cap closing machine which includes: a chuck (14); a motor (13); means for torque detecting (23); and a control unit (21) connected to the torque detector to verify the reaching of a threshold value -- see the machine translation of the reference attached hereto. The Simon reference discloses that the torque detector is a transducer. The containers (11) each arrive with a cap (12) from an unseen cap feeding station via conveyor (18), and at the cap closing station the motor (13) screws the cap (12) onto the container (11). The angle of rotation is measured using sensor (15) and the torque is detected using sensor (23), and these sensors send electrical signals to the controller (21). As stated in the machine translation, the motor is actuated for a number of turns (by use of the angle of rotation sensor), and the torque is detected to determine if the threshold value is reached or exceeded.

9. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Spatz et al. **(US 5,321,935)**.

The Spatz et al. reference discloses in the figure a cap closing machine which includes: a chuck (5); a motor (9); means for torque detecting (15); and a control unit (19) connected to the torque detector to verify the reaching of a threshold value.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spatz et al. **(US 5,321,935)** in view of Simon **(DE 19521924)**.

The Spatz et al. reference meets all of applicant's claimed subject matter with the exception of how the cap is fed to the container. In Spatz et al. the cap is placed in the chuck by the use of a pick method (see col. 4, line 5) at the location of closing, whereas the claimed method requires moving the container to a cap feeding station followed by taking the container together with the cap to a closing station where the cap is screwed to the container. The Simon reference teaches that the container with the cap thereon is taken from a location where the cap is inherently placed onto the container to the closing station by the use of a conveyor (18). Furthermore to the extent that one might argue that Simon does not teach moving the container to a cap feeding station where a cap is placed on a threaded end of the container, the examiner takes Official Notice that

such a technique of moving a container to a cap feeding station where a cap is placed on a threaded end of the container, followed by taking the container together with the cap to a closing station where the cap is screwed to the container is notoriously old and well known in the packaging art. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Spatz et al. method by having substituted moving a container to a cap feeding station where a cap is placed on a threaded end of the container, followed by taking the container together with the cap to a closing station where the cap is screwed to the container, for the stationary placing of the cap in the chuck by the pick method at the closing station, as suggested by Simon or by the notoriously old and well known technique, in order to speed up production by conveying the containers and caps.

Regarding claims 2 and 3, note that Spatz et al. discloses both detecting torque during selected number of turns (col. 5, first paragraph) by the use of angle of rotation presetting, or detecting torque during selected time period (col. 4, last paragraph) by the use of timing member presetting.

Regarding claim 4, Spatz et al. discloses electrical signals are generated.

Regarding claim 5, Spatz et al. discloses using a elongation measuring strip system (DMS) to torque sensing, but does not disclose using a transducer. Simon discloses that the torque sensor (23) is a transducer. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Spatz et al. machine by having substituted a transducer for the elongation measuring strip system (DMS) as such would have been an obvious matter of design

choice to a skilled artisan in the packaging art, and since applicant has not disclosed that a transducer as the torque sensor solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other types of torque sensors.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simon **(DE 19521924)** in view of Oshima **(JP 2009-81387)**.

The Simon reference does not disclose the type of electric motor used or that it is a positional controlled electric motor. The Oshima reference teaches that it is old and well known in the relevant art to make use of an electric servo-motor (which a person skilled in the art would know is a positional controlled electric motor) for screwing a cap to a container where torque control is important. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Simon machine by having substituted an electric servo-motor (a positional controlled electric motor) for the electric motor as such would have been an obvious matter of design choice to a skilled artisan, and since applicant has not disclosed that using a positional controlled motor solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other types of electric motors.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art, as applied to claim 6 above, and further in view of Oshima **(JP 2009-81387)**.

The Spatz et al. machine, as modified by Simon above, does not disclose the type of motor used or that it is a positional controlled electric motor. The Oshima

reference teaches that it is old and well known in the relevant art to make use of an electric servo-motor (which a person skilled in the art would know is a positional controlled electric motor) for screwing a cap to a container where torque control is important. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Spatz et al. machine by having substituted an electric servo-motor (a positional controlled electric motor), as suggested by Oshima, for the electric motor as such would have been an obvious matter of design choice to a skilled artisan, and since applicant has not disclosed that using a positional controlled motor solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other types of electric motors.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed on the attached form (PTO-892) are cited to show various capping machines and methods. All are cited as being of interest and to show the state of the prior art.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen F. Gerrity whose telephone number is 571-272-4460. The examiner can normally be reached on Monday - Friday from 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen F. Gerrity/
Stephen F. Gerrity
Primary Examiner
Art Unit 3721

24 May 2007